Burlington Conservation Board
Open Space Subcommittee
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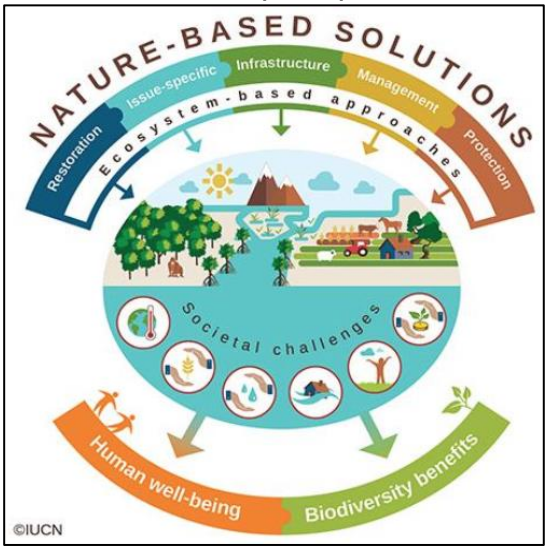
2020 Burlington Open Space Protection Plan – Climate Action Addendum

- ***Section I: Background and Context***
  - *Open Space in Burlington*
    - *Define (stems from prior OSPP)*
  - *Emergent Climate adaptation need*
    - *protect restore fund - overview of why have a climate adaptation addendum*
    - *pie chart showing investment/lack of investment*
- ***Section 2: Nature Based Solutions overview/integration*** *(see supporting documents on NBS)*
  - *What are NBS generally speaking? The IUCN Commission on Ecosystem Management defined them with these principals:*



1. Embrace nature conservation norms (and principles);
2. can be implemented alone or in an integrated manner with other solutions to societal challenges (e.g. technological and engineering solutions);
3. are determined by site-specific natural and cultural contexts that include traditional, local and scientific knowledge;
4. produce societal benefits in a fair and equitable way, in a manner that promotes transparency and broad participation;
5. maintain biological and cultural diversity and the ability of ecosystems to evolve over time;
6. are applied at a landscape scale;
7. recognize and address the trade-offs between the production of a few immediate economic benefits for development, and future options for the production of the full range of ecosystems services; and
8. are an integral part of the overall design of policies, and measures or actions, to address a specific challenge.

- *Based on what other communities are accomplishing/pursuing.* European cities have been using NBS in their cities for some time. We could adopt their goals and apply them in Burlington*:*
  - Enhancing sustainable urbanism
  - restoring degraded ecosystems
  - developing climate change adaptation and mitigation (*which this addendum is part of doing)
  - Improving risk management and Resilience.

This table is an example of each goal, and the actions that can meet them. NBS are often location specific, and we cannot apply a broad-brush stroke answer for what specific actions will help the most overall. However, with guidelines likes these, we can channel our work into specific types of action (ie. Restoration).

- *What does it mean to tackle climate change with nature-based solutions?*
  - It means that we put greater emphasis on nature based work that we are already doing, and incorporate it on a greater scale.
  - That we include citizens, partner organizations (for profit and non-profit), and other city departments in the planning and development of projects.
  - We will need creativity to develop solutions.
  - We will need good communications and outreach to engage and inform citizens

        - It means that we create a more resilient city landscape to prepare for all of the changes we will experience as climate change events increase in frequency and severity.
    - *Specific recommendations for Burlington*
        - *Rewilding existing open space. Identifying areas that could be restored or improved in their open space values such as school yard habitat projects,*
        - *Canopy targets*
        - *biodiversity*
        - *etc…*
        - Parkland Access, Connectivity, and Trails
            - Ongoing trails mapping and management
                - discuss City trail program and acknowledge trail networks, and the various investments, consider future structures and alignments, provide narrative on process of formalizing networks (arms process as standard). protecting areas through intentional and directed access for humans.
            - Burlington Wildways - special attention here to coalition model and how that relates to addressing climate adaptation
        - Green Infrastructure
            - Green Infrastructure buildout methodology and story
                - how are bump outs and installments prioritized and funded
                - how much area do they serve, what is their role and function?
                - What is the big picture and vision of the stormwater program in regard to climate adaptation
        - Urban Agriculture (let's give Patrick a chance to shape this early on if there is emergent things that aren't captured in the 2014 OSPP or if there is a twist on this piece that acknowledges Urban Ag role in Climate adaption)
            - Community based metrics - how much of Burlington's produce is grown in Intervale
            - Community gardens - adaptive models - communal plots vs individual plots, trend toward no-till vs. tilled (we have numbers on these trends to report on)
            - Other?
        - Conservation education
            - Overarching goals

        - Old Growth Forest
        - Natural History Baseline
        - Opportunity for reflection and voice of underserved and youth populations
    - Programs
        - Master Naturalist
        - ½ yard
        - Civic engagement
            - trail stewards
            - trained staff
- Signage and Interpretation
- Role of 311
- Role of Wildways - either explain here or above role of Wildways in climate adaptation, also a place to discuss the Lower Winooski Project?
- Natural Areas
    - Descriptions of conserved lands, values, and importance
    - add map with various land ownersSignificance of conserved areas noted under “Parkland Access…”
    - Rationale for natural area protection, pocket parks, green infrastructure, recreation, etc.
    - What are they (urban wild, park, novell ecosystems, pollinator habitat, etc. and how/why do they differ)?
    - Improve connectivity among our natural areas (as identified in MDP).
    - Improve mapping of our natural areas and on-the-ground assessment.
        - Current conditions
        - How many parcels over 10 acres have natural cover?
        - Identify those in need of management plans
        - Reference “I-naturalist” as a community-based resource
    - Consider biodiversity & its role in the urban setting.
        - How do we develop measurable outcomes for biodiversity?
        - Consider/articulate parameters for resilient landscape.
        - What should we use as indicators of biodiversity?
    - How do we speak to functional natural systems as opposed to a specific parcels attribute?

- Recommend a summit of naturalist and ecologist to support a conversation about concepts of functional ecosystems in the face of climate adaptation.
    - natural community restoration vs ecosystem regeneration - how do they compliment each other, what are their limitations, how do we define functionality
- Address ecosystem services
    - define this broadly - urban cooling, carbon sequestration, biodiversity, human health
- Urban Wilds:
    - Need to define/rebrand?
        - explain new program
    - Functions-and-values based rather than simply city owned (i.e. urban wilds can be non-city lands).
    - Emphasize wildlife and natural areas as first priority.
    - Which ones are to remain largely wild and which ones not?
    - How do we manage use?
- Address obstacles to connectivity such as private land that blocks access for people & wildlife.
    - contemplate opportunity for private landowners to participate (Rock Point etc…)
    - affirmative framework as opposed to focusing on obstacles - creating habitat connectivity across land blocks
- How do we identify conservation opportunities?

- **Section 3: Prior goals (Sec. 10 of 2014 update) and successes** (this could also be section 2 if we wanted to swap them)
    - Parkland Access, Connectivity, and Trails
        - Ongoing trails mapping and management
            - discuss City trail program and acknowledge trail networks, and the various investments, consider future structures and alignments, provide narrative on process of formalizing networks (arms process as standard)
    - Burlington Wildways - special attention here to coalition model and how that relates to addressing climate adaptation
    - New Park/Conservation Areas
        - 311 North Avenue conservation
        - Arms Forest Alignment
        - North Cove conservation (WVPD)
        - Rock Point conservation
        - Pomerleau Forest

        - Other?
    - Green Infrastructure
        - Great Streets improvements (stormwater components)
        - City Hall Park green stormwater components
        - Blanchard Beach tributary stormwater project
        - Other?
    - Urban Agriculture
    - Community based metrics - how much of Burlington's produce is grown in Intervale
    - Urban Agriculture Task Force and recommendations
    - Regulatory changes to facilitate and support urban ag
    - Codification of community garden incentive in the CDO
    - Other?
- **Section IV: Goals & Objectives**
    - Acknowledge the Climate Action Plan, the Urban Forestry Master Plan, and the Comprehensive Plan.
    - Identify measurable action items and identify responsible parties
    - Anticipate comprehensive update in 2025